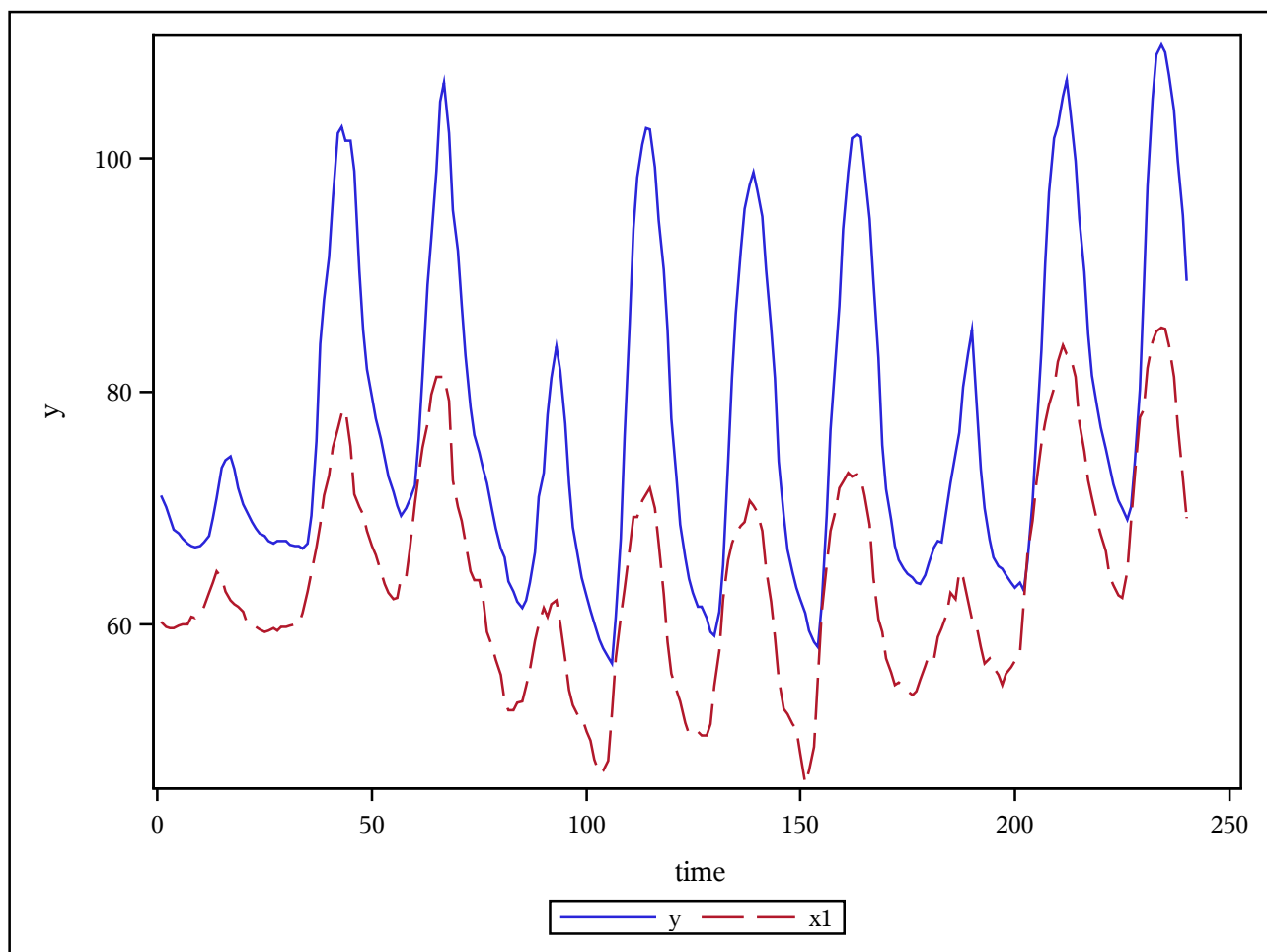




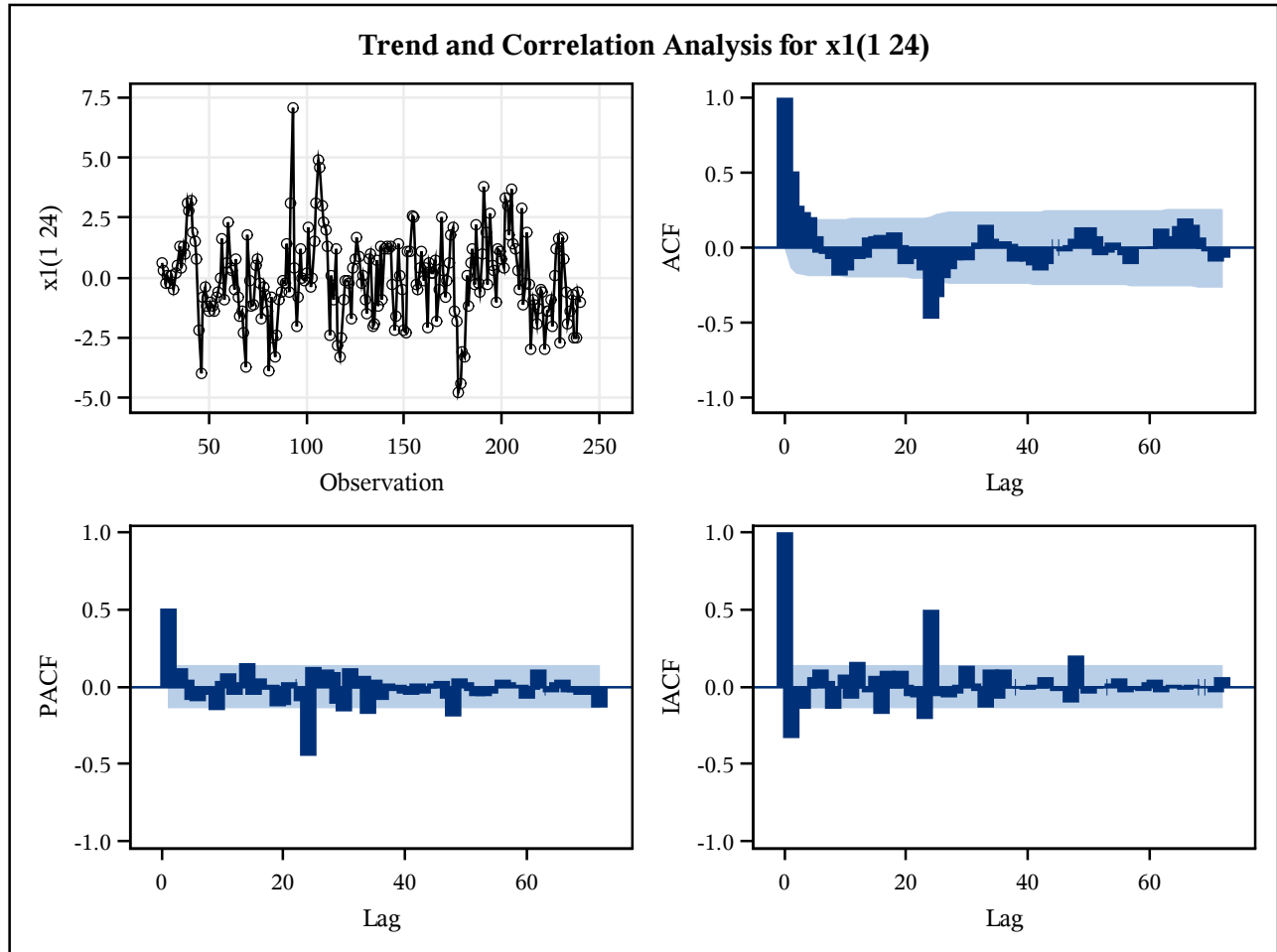
The ARIMA Procedure

Warning: The value of NLAG is larger than 25% of the series length. The asymptotic approximations used for correlation based statistics and confidence intervals may be poor.

Name of Variable = x1	
Period(s) of Differencing	1,24
Mean of Working Series	-0.02279
Standard Deviation	1.757163
Number of Observations	215
Observation(s) eliminated by differencing	25

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	95.83	6	<.0001	0.506	0.278	0.239	0.202	0.079	-0.031
12	112.32	12	<.0001	-0.046	-0.073	-0.188	-0.151	-0.044	-0.073
18	121.35	18	<.0001	-0.066	0.073	0.073	0.090	0.065	0.106
24	186.45	24	<.0001	0.020	-0.110	-0.074	-0.039	-0.153	-0.473
30	234.00	30	<.0001	-0.331	-0.206	-0.146	-0.088	-0.074	-0.080
36	242.06	36	<.0001	-0.006	0.034	0.157	0.056	0.030	0.040
42	257.46	42	<.0001	0.025	-0.096	-0.043	-0.091	-0.119	-0.153
48	262.04	48	<.0001	-0.109	0.004	0.002	-0.021	0.017	0.064
54	275.28	54	<.0001	0.135	0.136	0.074	-0.048	-0.034	0.033
60	279.84	60	<.0001	-0.012	-0.054	-0.111	-0.004	-0.007	-0.010
66	306.80	66	<.0001	0.012	0.131	0.071	0.078	0.144	0.194
72	319.70	72	<.0001	0.150	0.067	-0.005	-0.028	-0.094	-0.063

The ARIMA Procedure



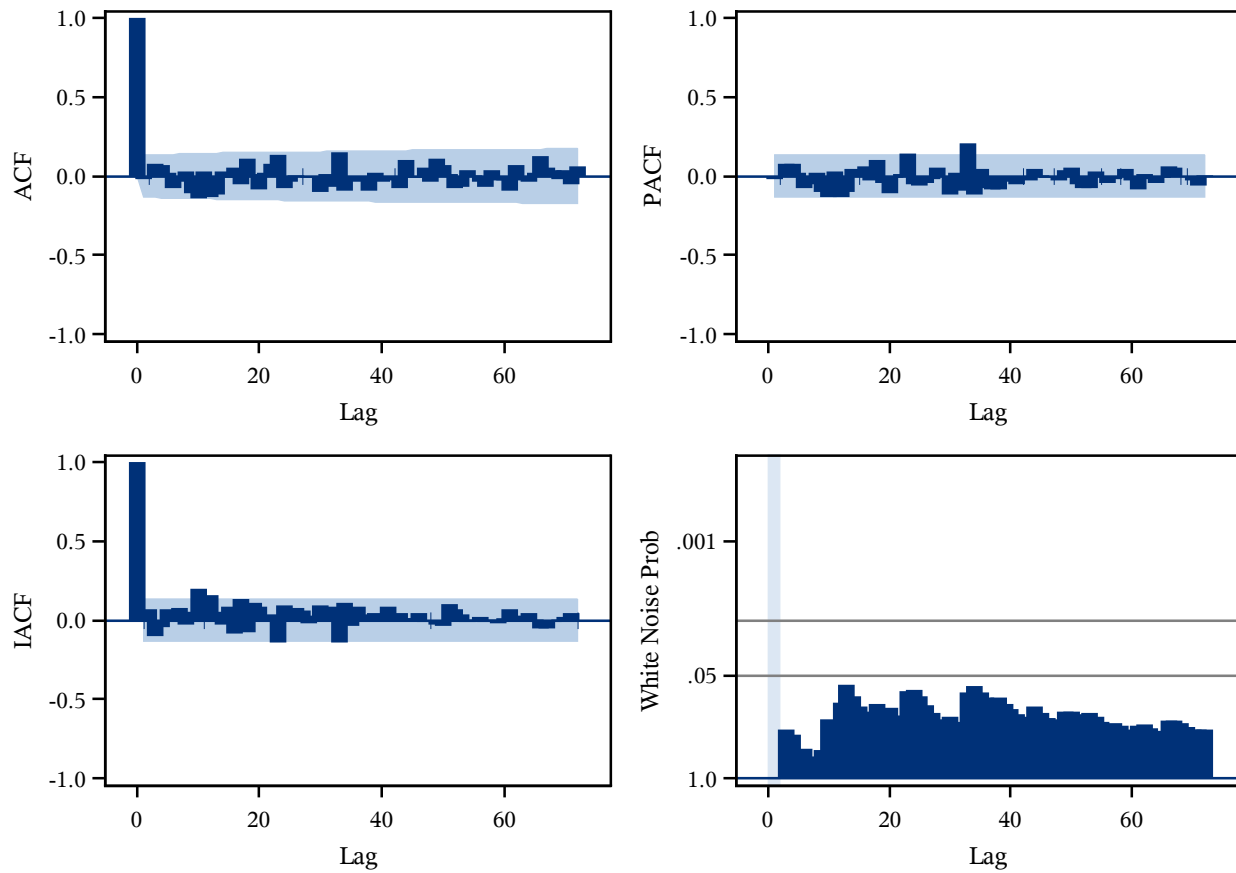
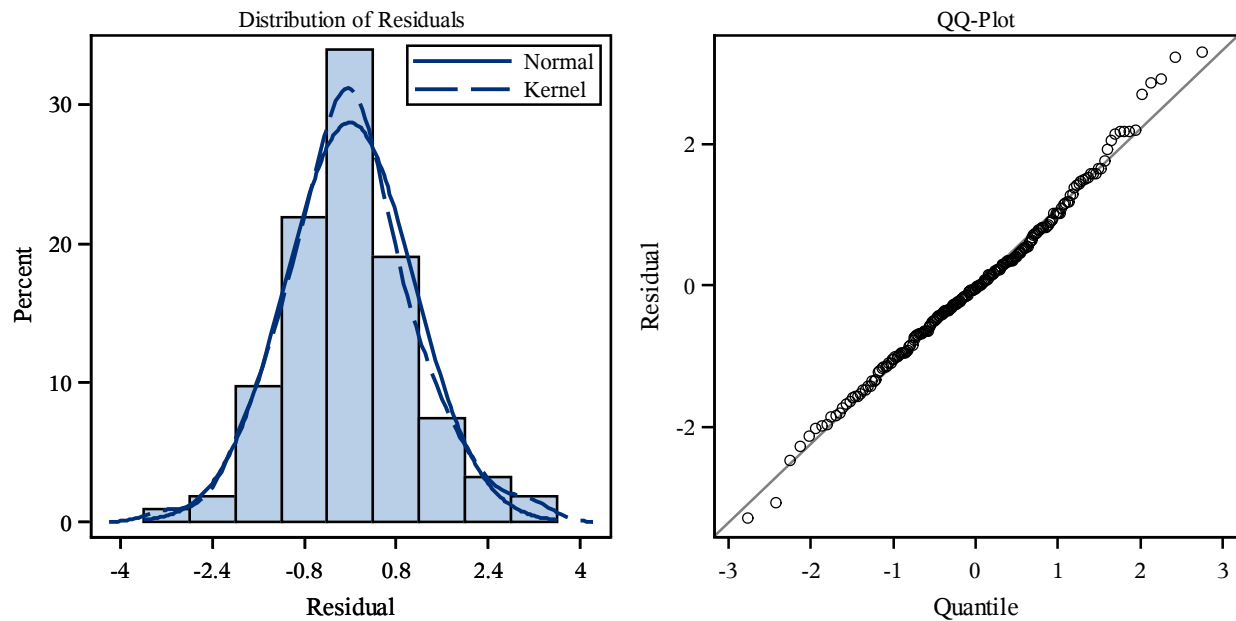
Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
MU	0.0095374	0.04994	0.19	0.8485	0
MA1,1	0.87882	0.12068	7.28	<.0001	24
AR1,1	0.53236	0.05404	9.85	<.0001	1

Constant Estimate	0.00446
Variance Estimate	1.247352
Std Error Estimate	1.116849
AIC	694.5818
SBC	704.6937
Number of Residuals	215

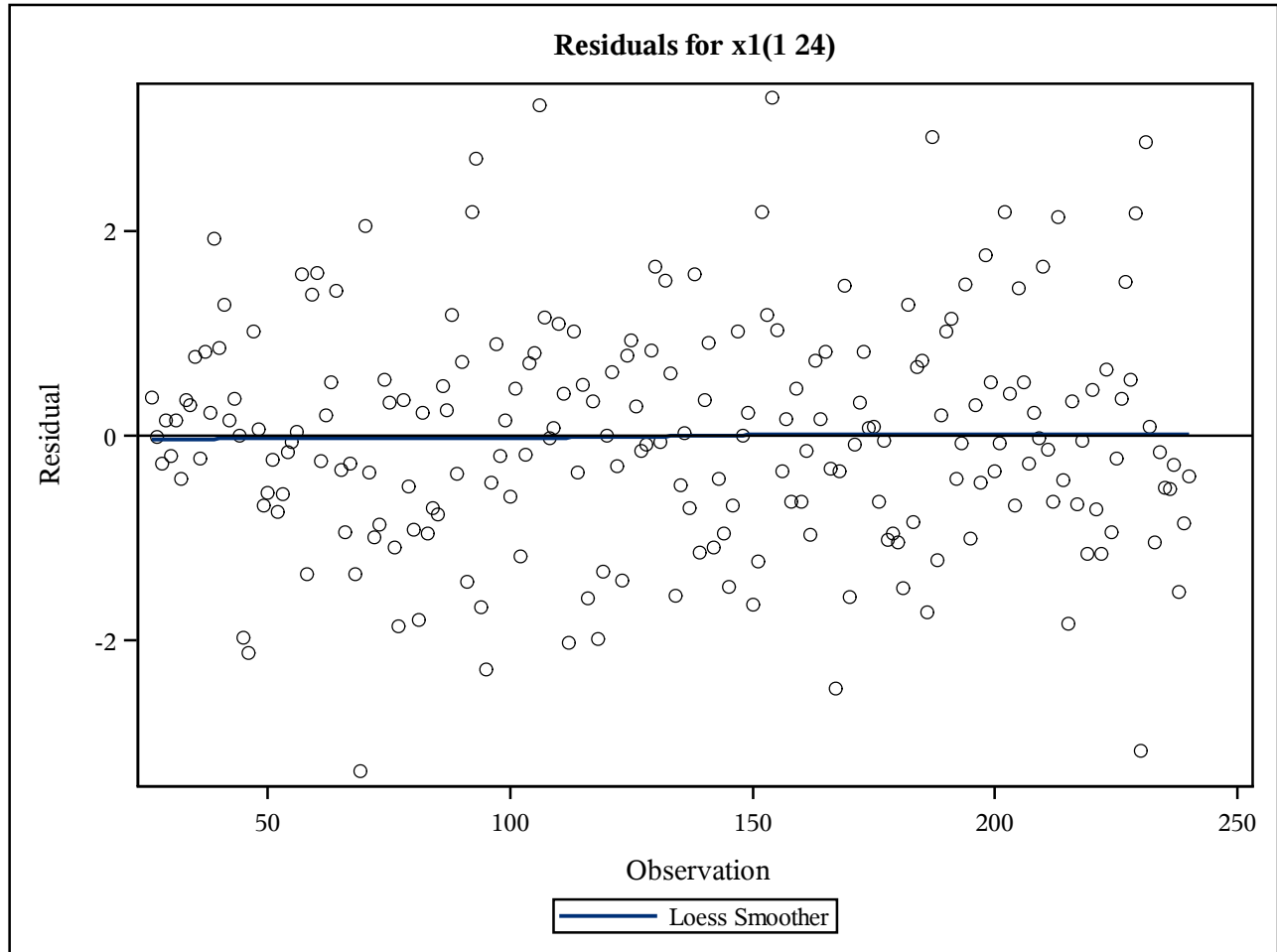
The ARIMA Procedure

Correlations of Parameter Estimates			
Parameter	MU	MA1,1	AR1,1
MU	1.000	0.011	-0.011
MA1,1	0.011	1.000	0.073
AR1,1	-0.011	0.073	1.000

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	3.87	4	0.4246	-0.022	-0.006	0.076	0.073	0.019	-0.074
12	15.70	10	0.1086	-0.036	0.030	-0.106	-0.141	0.028	-0.134
18	22.99	16	0.1139	-0.115	0.026	-0.012	0.052	-0.048	0.110
24	32.12	22	0.0754	0.013	-0.086	0.018	0.074	0.136	-0.075
30	35.19	28	0.1645	-0.036	0.004	-0.007	-0.015	-0.014	-0.102
36	45.11	34	0.0964	0.016	-0.071	0.154	-0.091	-0.017	-0.033
42	48.07	40	0.1784	-0.020	-0.093	0.023	-0.032	-0.024	-0.005
48	53.99	46	0.1954	-0.077	0.106	-0.010	-0.010	0.054	-0.037
54	61.78	52	0.1662	0.108	0.066	0.012	-0.076	-0.066	0.034
60	64.45	58	0.2612	0.002	-0.039	-0.066	0.040	-0.029	-0.027
66	73.95	64	0.1851	-0.094	0.068	-0.024	-0.035	0.024	0.122
72	78.10	70	0.2371	0.056	0.037	-0.020	0.036	-0.055	0.061

*The ARIMA Procedure***Residual Correlation Diagnostics for x1(1 24)****Residual Normality Diagnostics for x1(1 24)**

The ARIMA Procedure



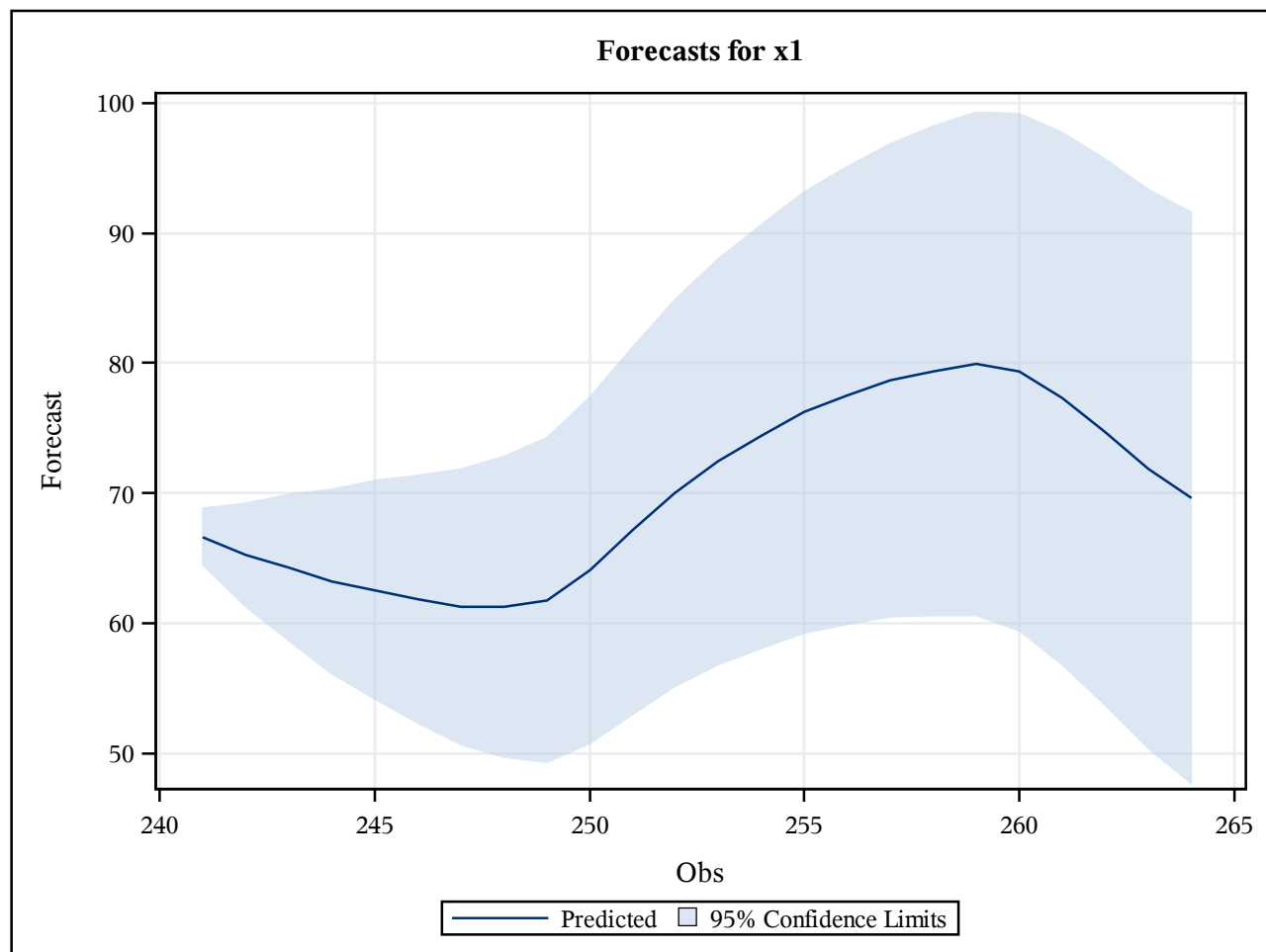
Model for variable x1	
Estimated Mean	0.009537
Period(s) of Differencing	1,24

Autoregressive Factors	
Factor 1:	1 - 0.53236 B**(1)

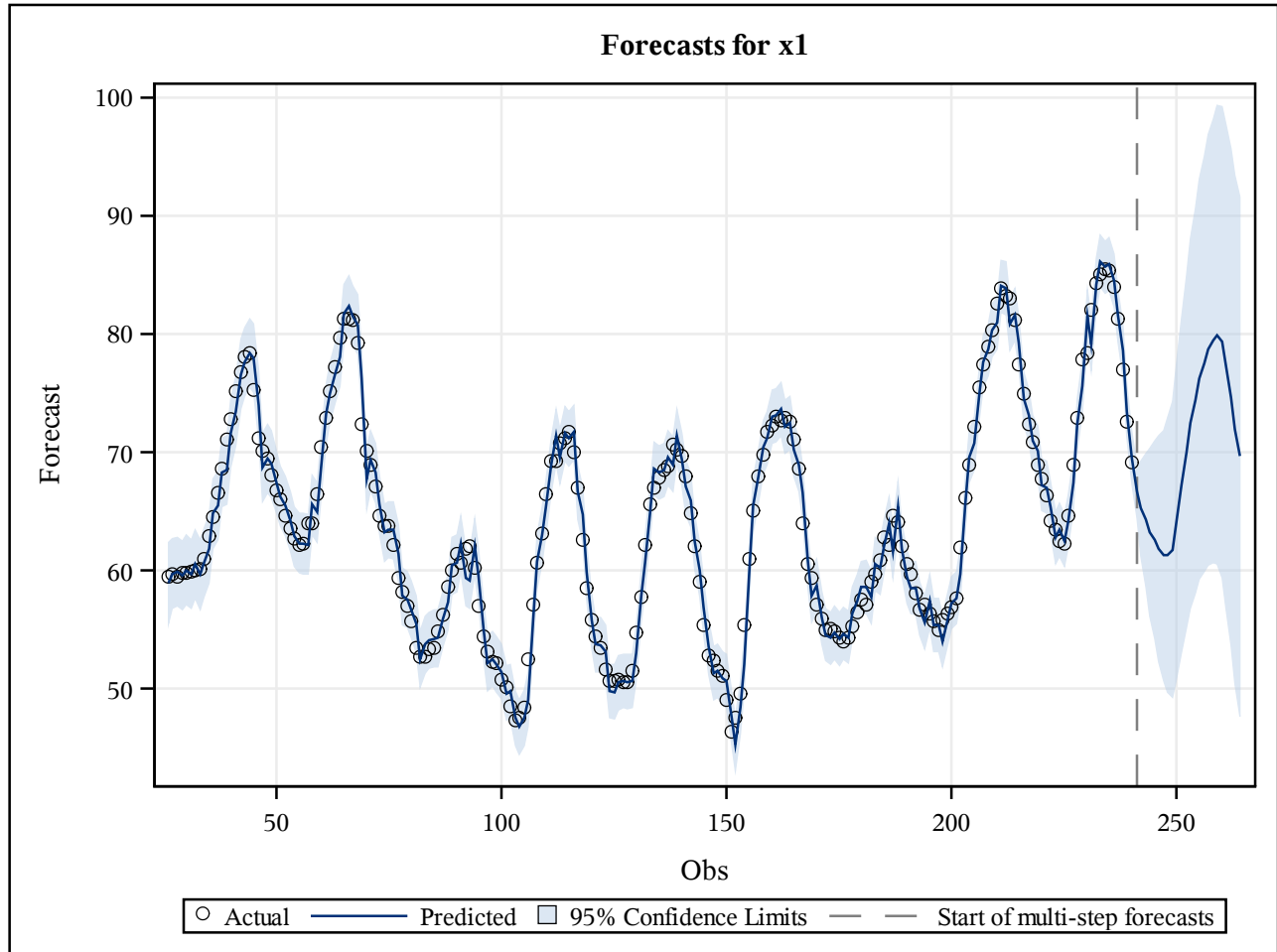
Moving Average Factors	
Factor 1:	1 - 0.87882 B**(24)

The ARIMA Procedure

Forecasts for variable x1				
Obs	Forecast	Std Error	95% Confidence Limits	
241	66.6533	1.1168	64.4643	68.8423
242	65.2258	2.0436	61.2204	69.2312
243	64.2647	2.8790	58.6219	69.9075
244	63.2394	3.6212	56.1420	70.3369
245	62.5644	4.2825	54.1708	70.9579
246	61.8534	4.8772	52.2943	71.4125
247	61.2420	5.4179	50.6231	71.8608
248	61.2669	5.9147	49.6742	72.8596
249	61.7557	6.3756	49.2597	74.2517
250	64.1197	6.8068	50.7787	77.4607
251	67.1580	7.2128	53.0211	81.2948
252	70.0163	7.5975	55.1254	84.9072
253	72.4256	7.9639	56.8167	88.0346
254	74.3711	8.3142	58.0756	90.6666
255	76.2064	8.6504	59.2520	93.1608
256	77.4971	8.9740	59.9085	95.0858
257	78.6700	9.2863	60.4691	96.8708
258	79.4080	9.5885	60.6148	98.2011
259	79.9317	9.8815	60.5644	99.2990
260	79.3156	10.1660	59.3907	99.2406
261	77.2805	10.4428	56.8131	97.7480
262	74.6671	10.7124	53.6712	95.6629
263	71.9096	10.9754	50.3982	93.4209
264	69.6314	11.2322	47.6166	91.6462

The ARIMA Procedure

The ARIMA Procedure



Warning: The value of NLAG is larger than 25% of the series length. The asymptotic approximations used for correlation based statistics and confidence intervals may be poor.

Name of Variable = y	
Period(s) of Differencing	1,24
Mean of Working Series	0.013023
Standard Deviation	2.852468
Number of Observations	215
Observation(s) eliminated by differencing	25

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	165.52	6	<.0001	0.684	0.402	0.247	0.119	-0.069	-0.216
12	208.59	12	<.0001	-0.240	-0.201	-0.210	-0.184	-0.106	-0.054
18	224.07	18	<.0001	-0.019	0.057	0.088	0.122	0.165	0.111
24	312.09	24	<.0001	-0.006	-0.109	-0.128	-0.179	-0.311	-0.452

The ARIMA Procedure

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
30	345.97	30	<.0001	-0.286	-0.156	-0.138	-0.038	0.041	0.096
36	364.24	36	<.0001	0.057	0.083	0.146	0.161	0.102	0.058
42	372.99	42	<.0001	0.059	0.007	-0.042	-0.076	-0.107	-0.101
48	377.84	48	<.0001	-0.084	-0.072	-0.061	-0.035	-0.001	0.020
54	383.20	54	<.0001	0.020	0.032	0.108	0.066	0.036	0.006
60	394.08	60	<.0001	0.037	0.005	-0.078	-0.129	-0.094	-0.059
66	421.56	66	<.0001	-0.066	-0.005	0.075	0.108	0.169	0.196
72	464.30	72	<.0001	0.223	0.206	0.136	0.040	-0.061	-0.135

Variable x1 has been differenced.

Correlation of y and x1	
Period(s) of Differencing	1,24
Number of Observations	215
Observation(s) eliminated by differencing	25
Variance of transformed series y	3.248473
Variance of transformed series x1	1.523009

Both series have been prewhitened.

Crosscorrelation Check Between Series									
To Lag	Chi-Square	DF	Pr > ChiSq	Crosscorrelations					
5	118.18	6	<.0001	0.225	0.467	0.382	0.349	0.096	0.066
11	135.72	12	<.0001	0.011	-0.100	-0.134	-0.144	-0.132	-0.124
17	163.83	18	<.0001	-0.220	-0.161	-0.195	-0.115	-0.073	-0.006
23	168.04	24	<.0001	0.016	0.030	-0.014	0.045	0.062	0.111
29	185.20	30	<.0001	0.175	0.132	0.142	0.105	-0.010	0.020
35	187.63	36	<.0001	-0.066	-0.049	-0.029	-0.048	-0.011	-0.034
41	204.84	42	<.0001	-0.074	-0.141	-0.162	-0.167	-0.015	-0.019
47	211.36	48	<.0001	-0.108	0.016	-0.001	0.041	0.057	0.116
53	235.76	54	<.0001	0.131	0.180	0.177	0.152	0.084	-0.049
59	242.99	60	<.0001	0.025	-0.070	-0.112	-0.025	-0.082	-0.091

The ARIMA Procedure

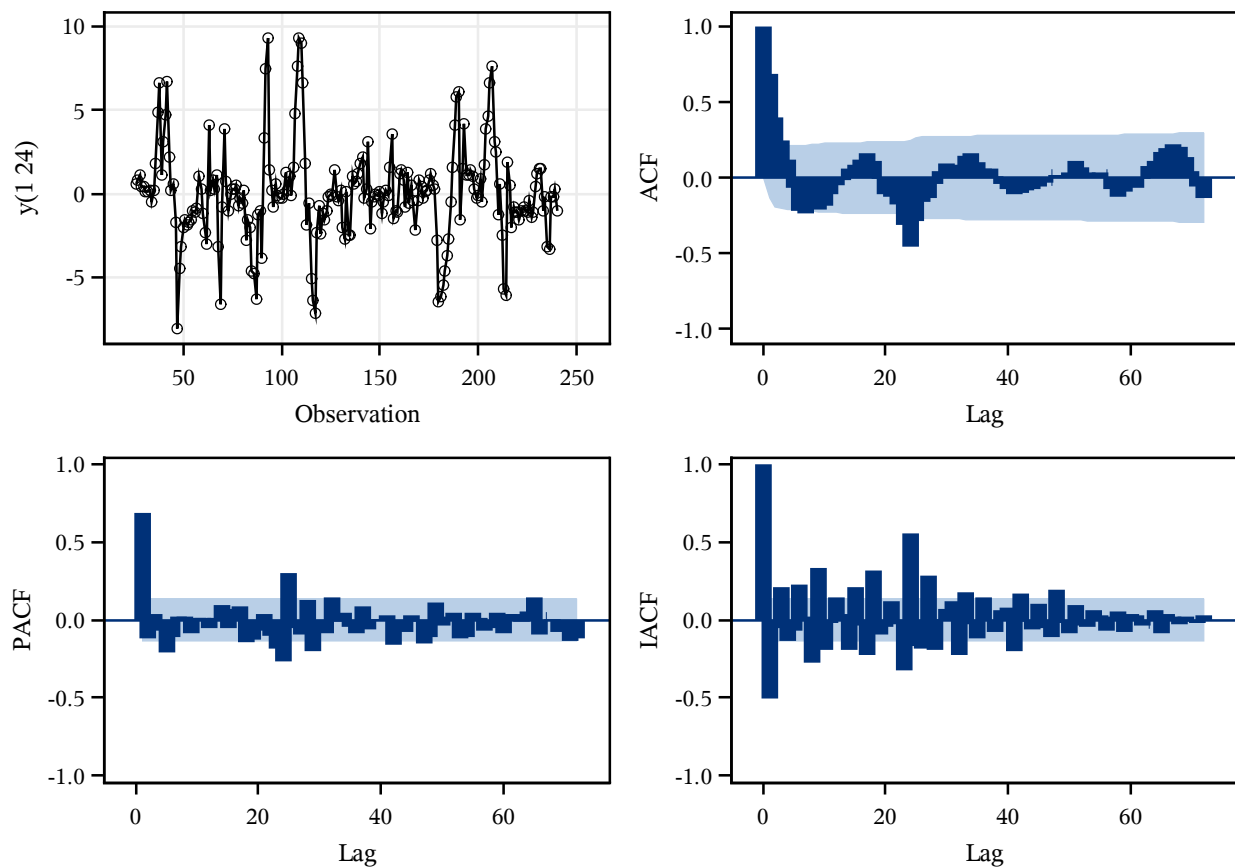
Crosscorrelation Check Between Series									
To Lag	Chi-Square	DF	Pr > ChiSq	Crosscorrelations					
65	258.33	66	<.0001	-0.098	-0.186	-0.132	-0.051	-0.071	-0.043
71	268.80	72	<.0001	-0.001	0.039	0.164	0.082	0.035	0.111

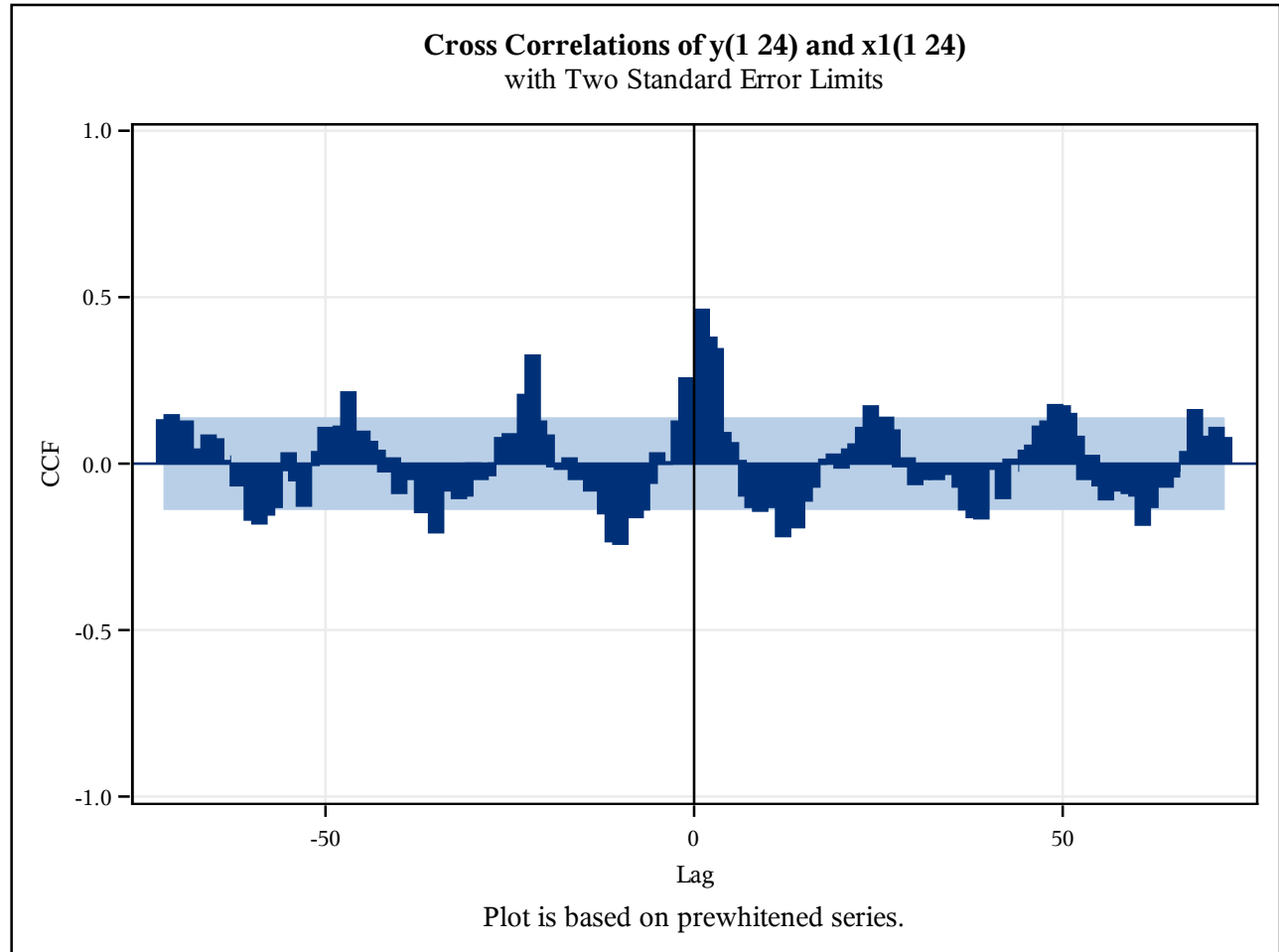
Both variables have been prewhitened by the following filter:

Prewhitening Filter

Autoregressive Factors	
Factor 1:	1 - 0.53236 B**(1)
Moving Average Factors	
Factor 1:	1 - 0.87882 B**(24)

Trend and Correlation Analysis for y(1 24)



The ARIMA Procedure

Maximum Likelihood Estimation							
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag	Variable	Shift
MU	0.02810	0.14075	0.20	0.8418	0	y	0
NUM1	0.27849	0.09295	3.00	0.0027	0	x1	0
NUM1,1	-0.54318	0.10283	-5.28	<.0001	1	x1	0
NUM1,2	-0.29208	0.10291	-2.84	0.0045	2	x1	0
NUM1,3	-0.43837	0.09343	-4.69	<.0001	3	x1	0

Constant Estimate	0.028097
Variance Estimate	4.198328
Std Error Estimate	2.048982
AIC	910.7235
SBC	927.5065
Number of Residuals	212

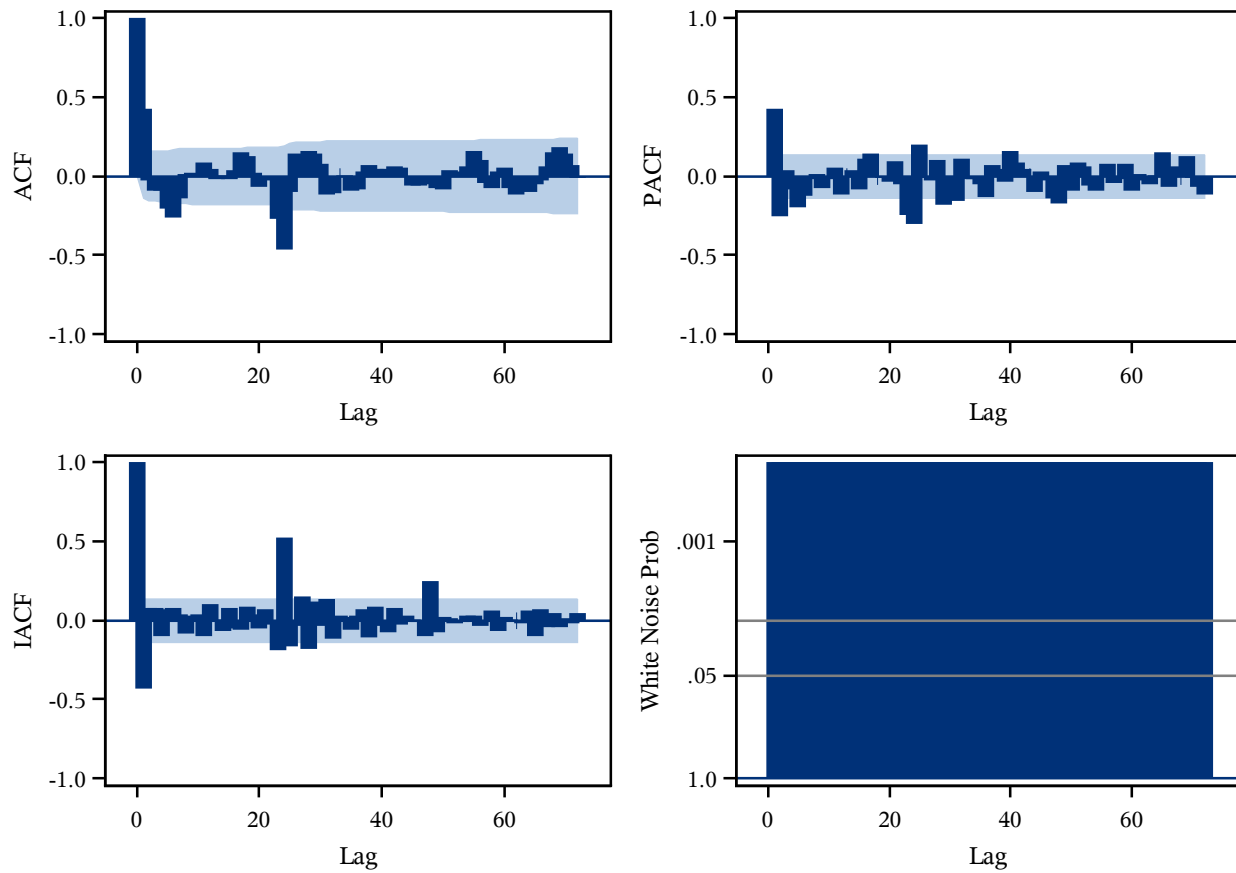
The ARIMA Procedure

Correlations of Parameter Estimates						
Variable Parameter	y MU	x1 NUM1	x1 NUM1,1	x1 NUM1,2	x1 NUM1,3	
y MU	1.000	0.010	-0.003	-0.006	0.005	
x1 NUM1	0.010	1.000	0.441	-0.025	0.120	
x1 NUM1,1	-0.003	0.441	1.000	-0.407	0.028	
x1 NUM1,2	-0.006	-0.025	-0.407	1.000	-0.441	
x1 NUM1,3	0.005	0.120	0.028	-0.441	1.000	

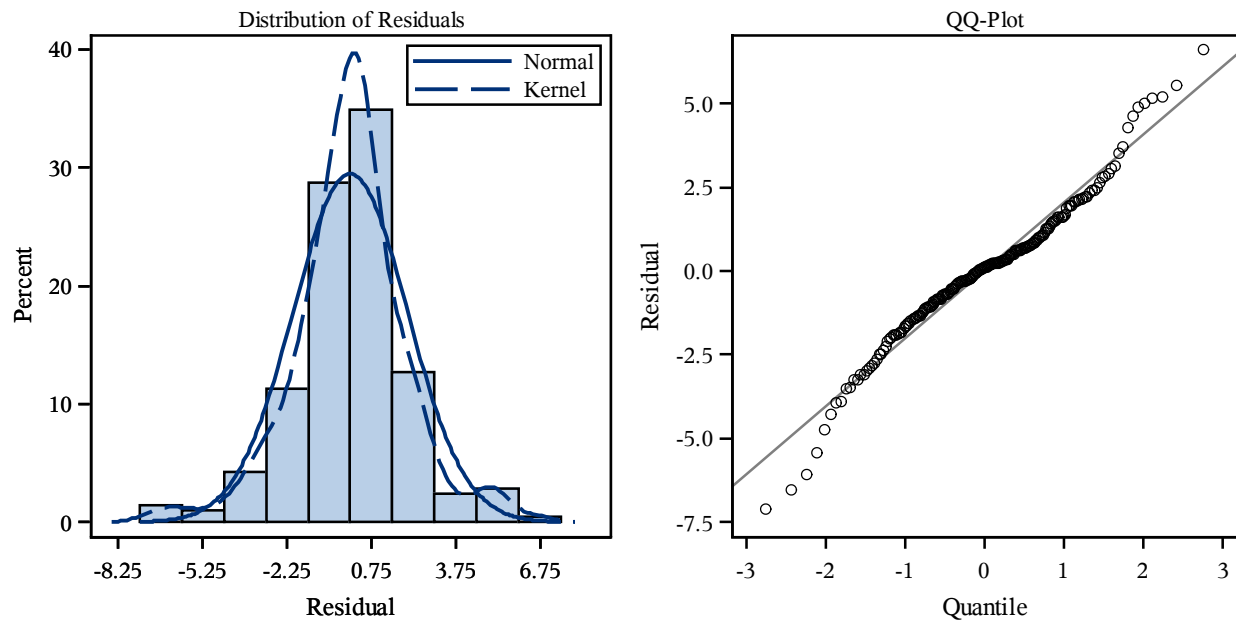
Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	67.53	6	<.0001	0.424	-0.027	-0.094	-0.092	-0.209	-0.265
12	74.39	12	<.0001	-0.144	0.016	0.019	0.002	0.088	0.042
18	83.91	18	<.0001	-0.021	0.007	-0.016	0.037	0.151	0.126
24	155.13	24	<.0001	0.023	-0.067	-0.013	-0.030	-0.271	-0.465
30	178.49	30	<.0001	-0.103	0.142	0.114	0.160	0.139	0.079
36	188.67	36	<.0001	-0.114	-0.107	-0.006	0.003	-0.095	-0.082
42	192.95	42	<.0001	0.030	0.071	0.048	0.046	0.041	0.065
48	196.70	48	<.0001	0.052	-0.007	-0.061	-0.060	-0.029	-0.052
54	202.10	54	<.0001	-0.075	-0.083	0.037	0.021	0.031	0.063
60	215.47	60	<.0001	0.154	0.103	-0.044	-0.077	0.027	0.054
66	227.05	66	<.0001	-0.074	-0.117	-0.071	-0.101	-0.053	-0.031
72	253.13	72	<.0001	0.061	0.147	0.181	0.140	0.067	-0.010

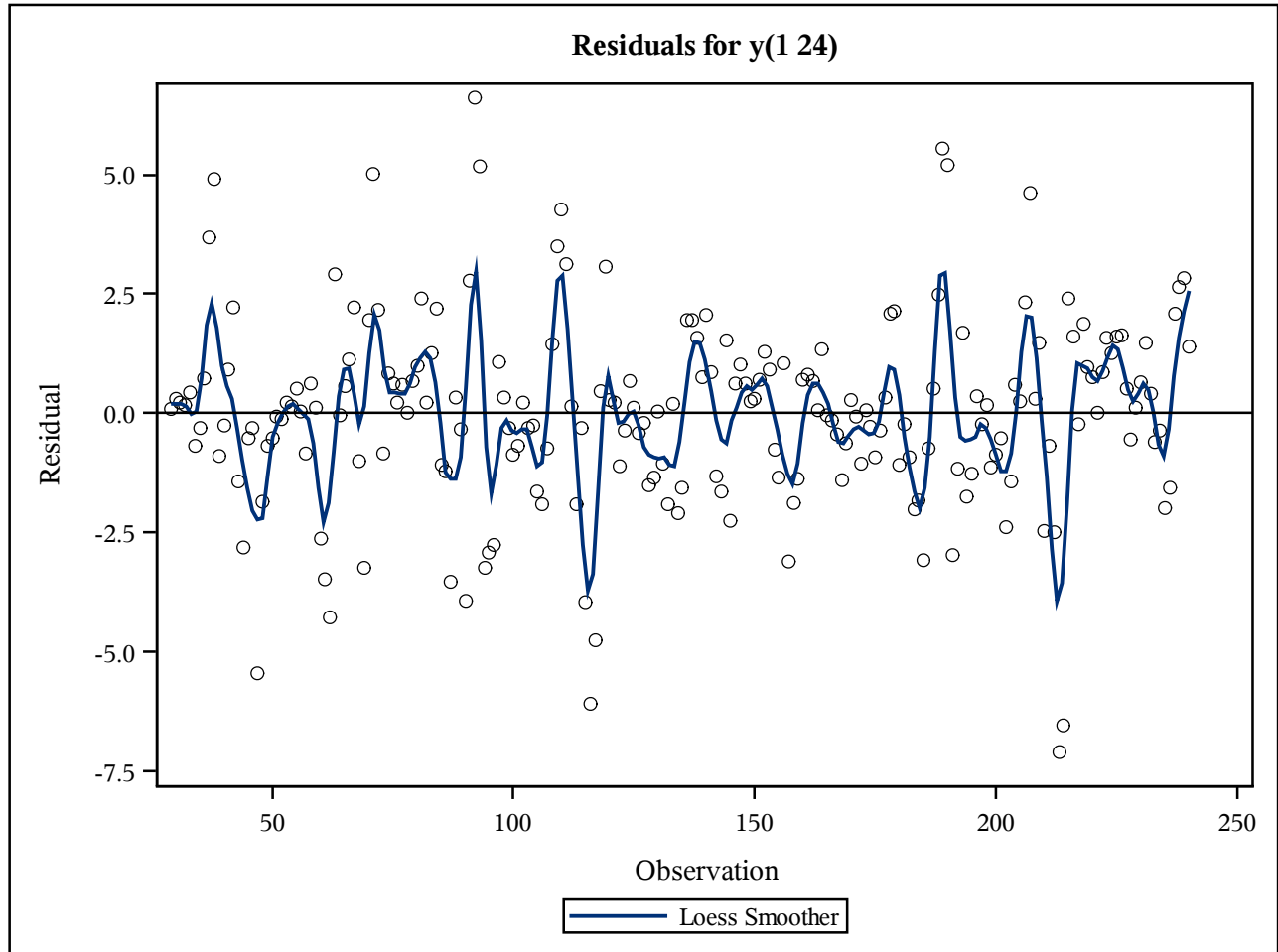
The ARIMA Procedure

Residual Correlation Diagnostics for y(1 24)



Residual Normality Diagnostics for y(1 24)



The ARIMA Procedure

Crosscorrelation Check of Residuals with Input x1									
To Lag	Chi-Square	DF	Pr > ChiSq	Crosscorrelations					
5	1.72	3	0.6330	0.006	-0.038	-0.058	-0.046	-0.019	0.029
11	6.73	9	0.6657	0.040	-0.069	-0.083	-0.084	-0.050	-0.028
17	10.70	15	0.7735	-0.095	0.051	0.028	-0.012	0.022	0.075
23	14.33	21	0.8550	0.067	-0.023	-0.033	0.022	0.000	-0.103
29	17.58	27	0.9159	0.013	-0.043	-0.075	-0.012	-0.075	-0.043
35	29.88	33	0.6232	-0.072	0.020	0.117	0.118	0.106	0.117
41	34.06	39	0.6946	0.116	0.025	0.015	-0.056	0.022	0.041
47	35.57	45	0.8419	-0.077	0.006	0.011	-0.024	0.011	0.017
53	38.15	51	0.9083	0.005	0.064	0.055	0.027	0.065	-0.008
59	42.51	57	0.9236	0.061	0.016	-0.080	-0.016	-0.033	-0.094
65	45.79	63	0.9494	-0.039	-0.080	-0.021	0.070	0.017	-0.044
71	48.14	69	0.9736	0.021	-0.026	0.082	0.051	-0.015	0.020

The ARIMA Procedure

Model for variable y	
Estimated Intercept	0.028097
Period(s) of Differencing	1,24

Input Number 1	
Input Variable	x1
Period(s) of Differencing	1,24

Numerator Factors	
Factor 1:	0.27849 + 0.54318 B**(1) + 0.29208 B**(2) + 0.43837 B**(3)

Warning: The model defined by the new estimates is unstable. The iteration process has been terminated.

Warning: Estimates may not have converged.

ARIMA Estimation Optimization Summary	
Estimation Method	Maximum Likelihood
Parameters Estimated	12
Termination Criteria	Maximum Relative Change in Estimates
Iteration Stopping Value	0.001
Criteria Value	54.89178
Maximum Absolute Value of Gradient	19.17649
R-Square Change from Last Iteration	0.136185
Objective Function	Log Gaussian Likelihood
Objective Function Value	-357.765
Marquardt's Lambda Coefficient	0.00001
Numerical Derivative Perturbation Delta	0.001
Iterations	6
Warning Message	Estimates may not have converged.

Maximum Likelihood Estimation							
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag	Variable	Shift
MU	-0.01263	0.02439	-0.52	0.6047	0	y	0
MA1,1	0.99946	30.89652	0.03	0.9742	24	y	0
AR1,1	0.49057	0.06311	7.77	<.0001	1	y	0
AR1,2	-0.21610	0.06945	-3.11	0.0019	2	y	0

The ARIMA Procedure

Maximum Likelihood Estimation							
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag	Variable	Shift
AR1,3	-0.06540	0.07052	-0.93	0.3537	3	y	0
AR1,4	0.09474	0.07074	1.34	0.1805	4	y	0
AR1,5	-0.18631	0.06873	-2.71	0.0067	5	y	0
AR1,6	-0.12786	0.06325	-2.02	0.0432	6	y	0
NUM1	0.19432	0.06851	2.84	0.0046	0	x1	0
NUM1,1	-0.62813	0.06676	-9.41	<.0001	1	x1	0
NUM1,2	-0.42100	0.06636	-6.34	<.0001	2	x1	0
NUM1,3	-0.33137	0.06888	-4.81	<.0001	3	x1	0

Constant Estimate	-0.01276
Variance Estimate	1.396747
Std Error Estimate	1.18184
AIC	739.5297
SBC	779.8087
Number of Residuals	212

Correlations of Parameter Estimates												
Variable Parameter	y MU	y MA1,1	y AR1,1	y AR1,2	y AR1,3	y AR1,4	y AR1,5	y AR1,6	x1 NUM1	x1 NUM1,1	x1 NUM1,2	x1 NUM1,3
y MU	1.000	-0.091	0.016	0.025	0.023	0.022	0.016	0.036	-0.029	0.065	0.062	0.047
y MA1,1	-0.091	1.000	-0.011	-0.069	-0.019	0.023	-0.020	-0.030	-0.065	-0.134	-0.035	0.047
y AR1,1	0.016	-0.011	1.000	-0.459	0.222	0.049	-0.106	0.260	-0.193	-0.027	-0.094	-0.075
y AR1,2	0.025	-0.069	-0.459	1.000	-0.502	0.158	0.057	-0.117	0.056	0.189	-0.013	-0.063
y AR1,3	0.023	-0.019	0.222	-0.502	1.000	-0.476	0.175	0.056	0.012	-0.073	0.159	-0.016
y AR1,4	0.022	0.023	0.049	0.158	-0.476	1.000	-0.511	0.228	-0.015	-0.020	-0.087	0.151
y AR1,5	0.016	-0.020	-0.106	0.057	0.175	-0.511	1.000	-0.456	-0.071	0.061	0.004	-0.110
y AR1,6	0.036	-0.030	0.260	-0.117	0.056	0.228	-0.456	1.000	-0.006	0.053	0.039	0.001
x1 NUM1	-0.029	-0.065	-0.193	0.056	0.012	-0.015	-0.071	-0.006	1.000	0.032	0.275	0.256
x1 NUM1,1	0.065	-0.134	-0.027	0.189	-0.073	-0.020	0.061	0.053	0.032	1.000	-0.081	-0.271

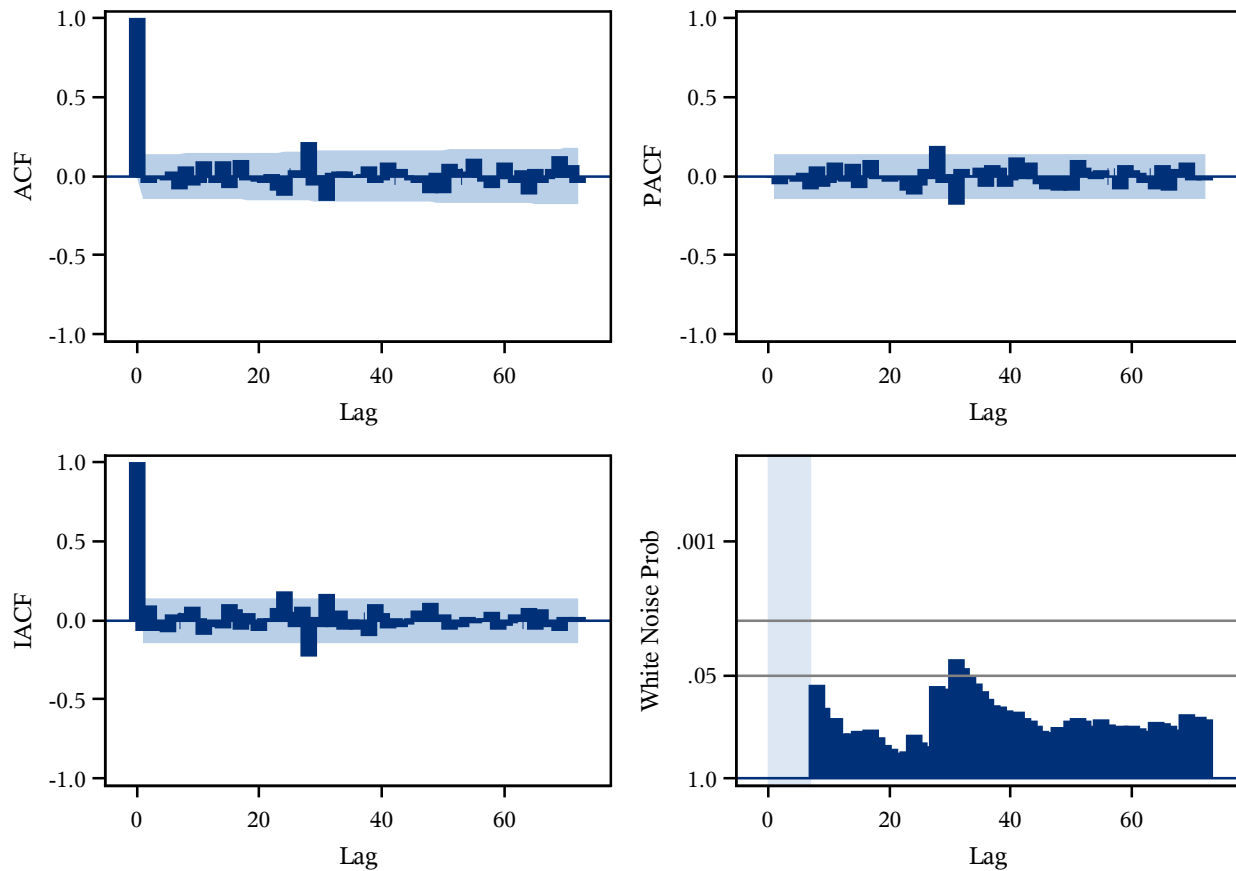
The ARIMA Procedure

Correlations of Parameter Estimates												
Variable Parameter	y MU	y MA1,1	y AR1,1	y AR1,2	y AR1,3	y AR1,4	y AR1,5	y AR1,6	x1 NUM1	x1 NUM1,1	x1 NUM1,2	x1 NUM1,3
x1 NUM1,2	0.062	-0.035	-0.094	-0.013	0.159	-0.087	0.004	0.039	0.275	-0.081	1.000	-0.015
x1 NUM1,3	0.047	0.047	-0.075	-0.063	-0.016	0.151	-0.110	0.001	0.256	-0.271	-0.015	1.000

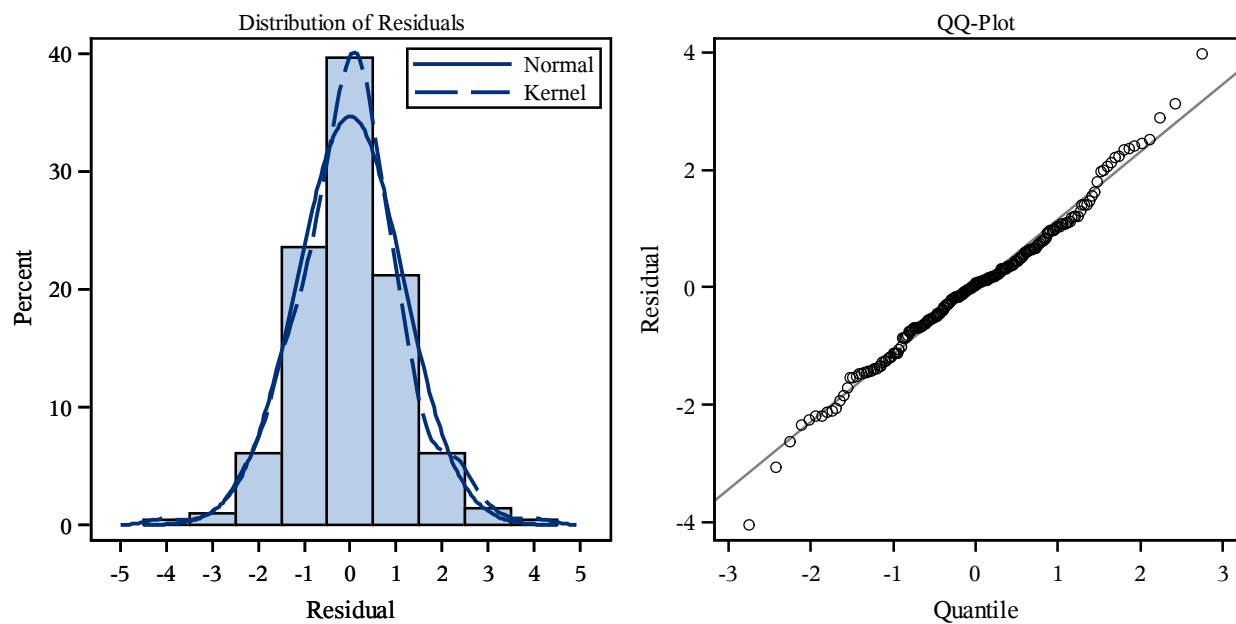
Autocorrelation Check of Residuals										
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations						
6	.	0	.	-0.014	-0.048	-0.019	-0.011	-0.029	0.026	
12	6.43	5	0.2669	-0.084	0.061	-0.057	-0.042	0.092	-0.015	
18	12.93	11	0.2979	-0.046	0.090	-0.078	0.003	0.104	-0.031	
24	19.81	17	0.2843	-0.012	-0.037	-0.047	0.016	-0.094	-0.125	
30	32.24	23	0.0952	-0.006	0.037	-0.011	0.213	-0.059	0.007	
36	39.17	29	0.0985	-0.158	0.023	0.032	0.030	-0.013	-0.012	
42	42.78	35	0.1717	0.016	0.062	-0.044	-0.027	0.084	-0.001	
48	47.54	41	0.2236	0.048	0.007	-0.026	-0.047	-0.020	-0.108	
54	53.41	47	0.2416	0.022	-0.109	0.076	0.044	-0.003	0.029	
60	60.96	53	0.2114	0.108	-0.008	-0.032	-0.075	-0.017	0.085	
66	67.39	59	0.2120	-0.022	-0.044	0.038	-0.115	0.048	-0.040	
72	75.38	65	0.1779	-0.018	0.046	0.128	-0.009	0.067	-0.042	

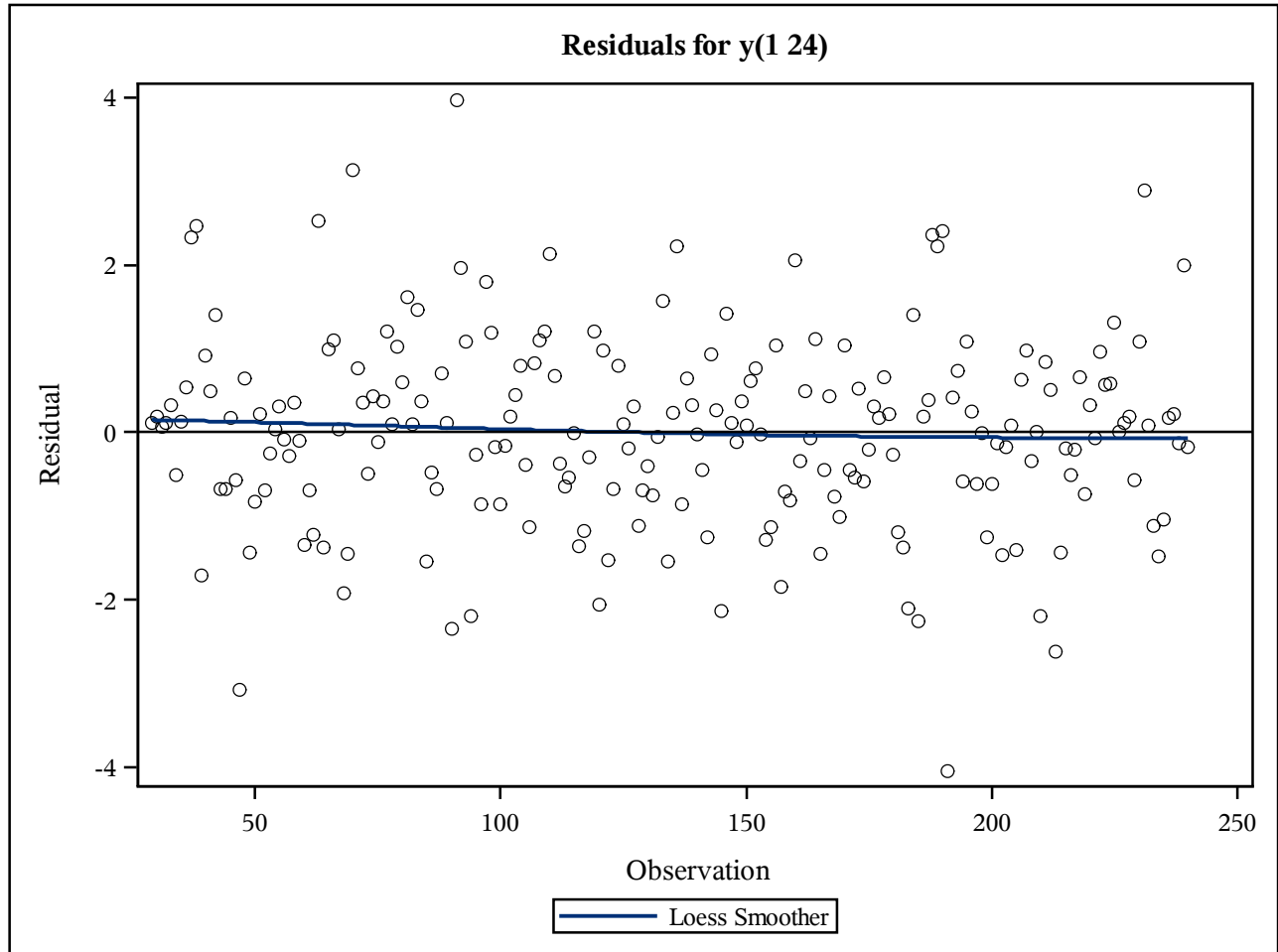
The ARIMA Procedure

Residual Correlation Diagnostics for y(1 24)



Residual Normality Diagnostics for y(1 24)



The ARIMA Procedure

Crosscorrelation Check of Residuals with Input x1									
To Lag	Chi-Square	DF	Pr > ChiSq	Crosscorrelations					
5	1.24	3	0.7434	-0.035	-0.023	-0.002	0.004	0.023	0.060
11	7.62	9	0.5734	0.012	-0.108	-0.057	-0.116	-0.040	0.006
17	12.87	15	0.6124	-0.134	0.031	-0.074	-0.009	-0.020	-0.007
23	14.69	21	0.8380	0.060	0.018	-0.057	0.037	0.007	-0.007
29	19.59	27	0.8475	0.002	-0.071	-0.020	-0.009	-0.131	0.017
35	24.71	33	0.8501	-0.075	-0.007	0.084	0.026	0.053	0.089
41	28.84	39	0.8832	0.024	0.038	0.016	-0.040	0.112	0.055
47	34.51	45	0.8716	-0.086	0.100	-0.074	-0.044	0.042	-0.001
53	36.54	51	0.9366	-0.003	0.068	-0.017	-0.005	-0.014	-0.066
59	41.66	57	0.9366	0.121	-0.034	-0.046	0.069	-0.026	-0.026
65	47.04	63	0.9335	0.027	-0.138	-0.002	0.072	-0.006	-0.022
71	50.85	69	0.9503	0.003	-0.024	0.110	0.004	-0.009	0.072

The ARIMA Procedure

Model for variable y	
Estimated Intercept	-0.01263
Period(s) of Differencing	1,24

Autoregressive Factors	
Factor 1:	$1 - 0.49057 B^{**}(1) + 0.2161 B^{**}(2) + 0.0654 B^{**}(3) - 0.09474 B^{**}(4) + 0.18631 B^{**}(5) + 0.12786 B^{**}(6)$

Moving Average Factors	
Factor 1:	$1 - 0.99946 B^{**}(24)$

Input Number 1	
Input Variable	x1
Period(s) of Differencing	1,24

Numerator Factors	
Factor 1:	$0.19432 + 0.62813 B^{**}(1) + 0.421 B^{**}(2) + 0.33137 B^{**}(3)$

Maximum Likelihood Estimation							
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag	Variable	Shift
AR1,1	0.49502	0.06794	7.29	<.0001	1	y	0
AR1,2	-0.22034	0.06716	-3.28	0.0010	2	y	0
AR1,3	-0.14839	0.06688	-2.22	0.0265	5	y	0
AR1,4	-0.14956	0.06843	-2.19	0.0288	6	y	0
AR2,1	-0.51012	0.06190	-8.24	<.0001	24	y	0
NUM1	0.20995	0.07838	2.68	0.0074	0	x1	0
NUM1,1	-0.54585	0.07652	-7.13	<.0001	1	x1	0
NUM1,2	-0.39811	0.07804	-5.10	<.0001	2	x1	0
NUM1,3	-0.35423	0.07720	-4.59	<.0001	3	x1	0

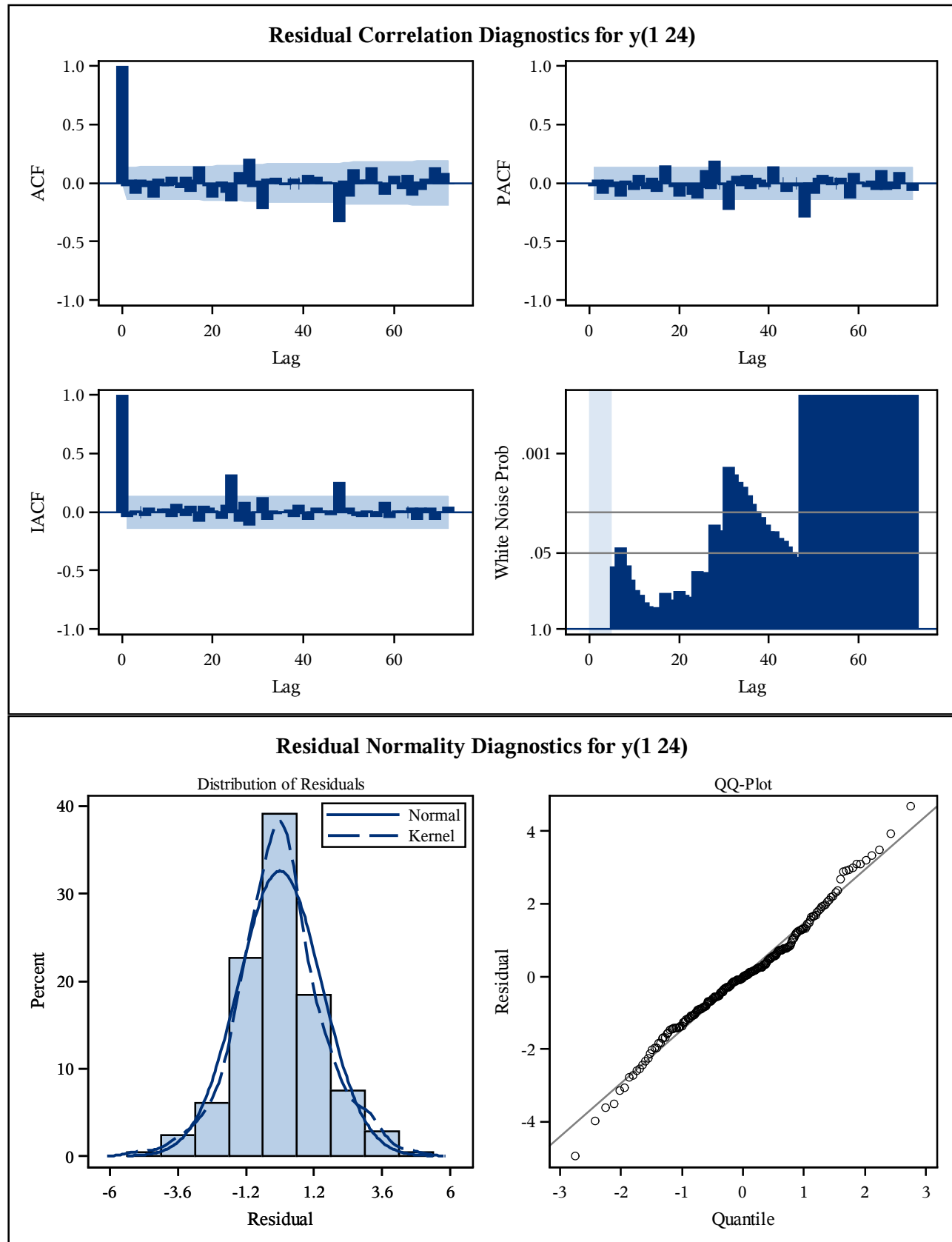
Variance Estimate	2.24468
Std Error Estimate	1.498226
AIC	789.7945
SBC	820.0038
Number of Residuals	212

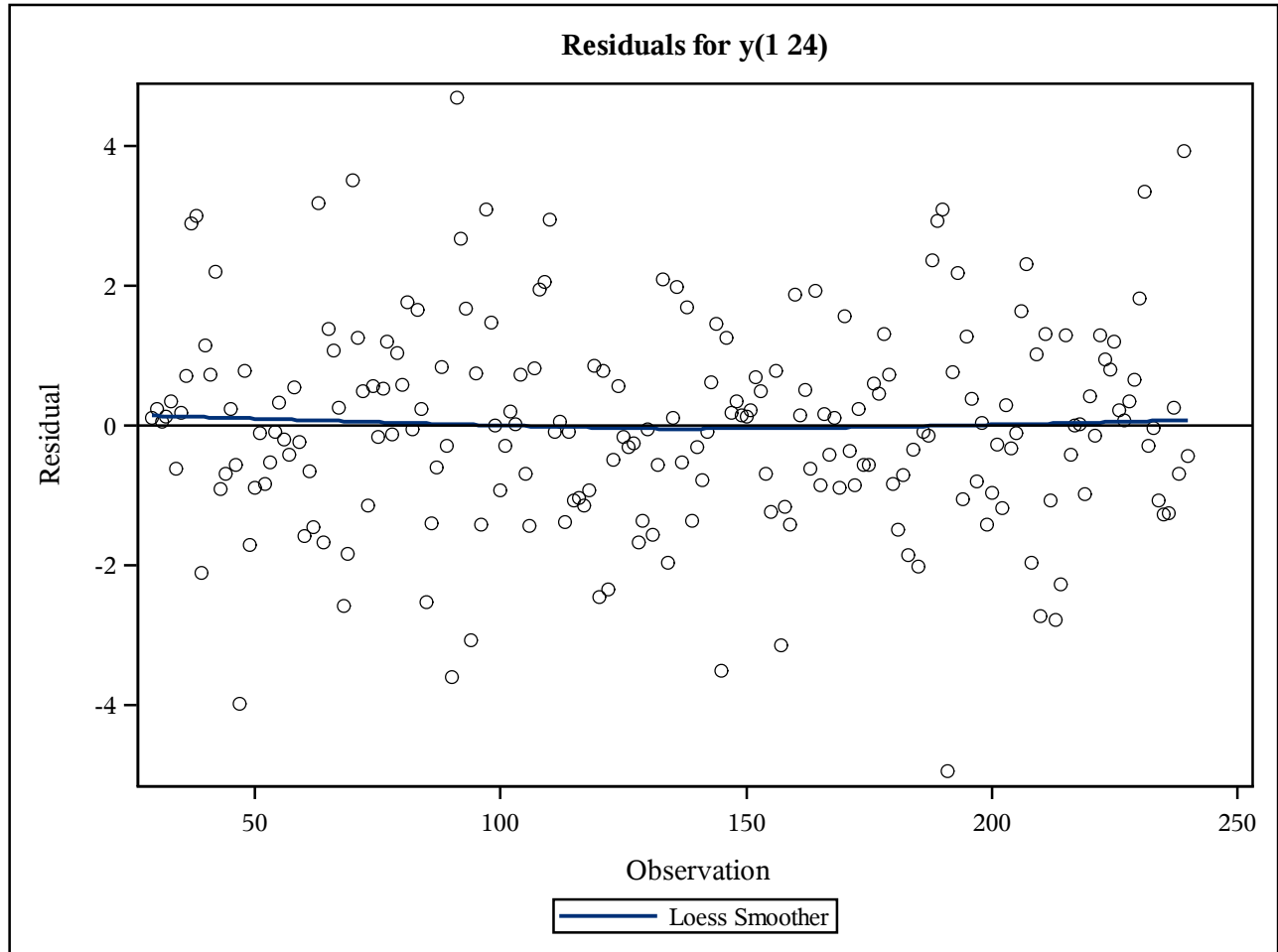
The ARIMA Procedure

Correlations of Parameter Estimates									
Variable Parameter	y AR1,1	y AR1,2	y AR1,3	y AR1,4	y AR2,1	x1 NUM1	x1 NUM1,1	x1 NUM1,2	x1 NUM1,3
y AR1,1	1.000	-0.437	-0.018	0.206	0.047	-0.207	0.029	-0.089	-0.078
y AR1,2	-0.437	1.000	0.077	-0.038	-0.001	0.105	0.156	0.110	-0.020
y AR1,3	-0.018	0.077	1.000	-0.426	0.064	-0.123	0.044	-0.021	-0.057
y AR1,4	0.206	-0.038	-0.426	1.000	0.020	0.036	0.090	0.055	-0.019
y AR2,1	0.047	-0.001	0.064	0.020	1.000	-0.016	0.076	0.248	-0.076
x1 NUM1	-0.207	0.105	-0.123	0.036	-0.016	1.000	0.020	0.271	0.211
x1 NUM1,1	0.029	0.156	0.044	0.090	0.076	0.020	1.000	-0.031	-0.272
x1 NUM1,2	-0.089	0.110	-0.021	0.055	0.248	0.271	-0.031	1.000	-0.029
x1 NUM1,3	-0.078	-0.020	-0.057	-0.019	-0.076	0.211	-0.272	-0.029	1.000

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	2.95	1	0.0861	-0.025	0.029	-0.095	0.032	-0.038	0.025
12	7.80	7	0.3503	-0.125	0.033	-0.031	-0.030	0.054	-0.017
18	14.96	13	0.3100	-0.045	0.051	-0.075	0.033	0.140	-0.010
24	27.02	19	0.1042	-0.026	-0.126	-0.038	0.009	-0.083	-0.159
30	40.24	25	0.0275	-0.008	0.098	-0.011	0.205	-0.037	0.023
36	53.56	31	0.0072	-0.219	0.034	0.036	0.048	-0.009	-0.019
42	55.23	37	0.0274	-0.003	0.038	-0.003	-0.011	0.069	0.004
48	86.46	43	<.0001	0.050	-0.015	0.011	0.005	-0.009	-0.332
54	94.66	49	<.0001	0.019	-0.116	0.118	-0.010	0.026	0.027
60	104.55	55	<.0001	0.137	0.013	-0.010	-0.102	-0.013	0.065
66	111.90	61	<.0001	-0.010	-0.050	0.070	-0.112	0.013	-0.061
72	120.56	67	<.0001	0.041	0.028	0.133	-0.015	0.083	-0.009

The ARIMA Procedure



The ARIMA Procedure

Crosscorrelation Check of Residuals with Input x1									
To Lag	Chi-Square	DF	Pr > ChiSq	Crosscorrelations					
5	1.37	2	0.5035	-0.011	0.011	0.014	0.019	0.023	0.072
11	7.70	8	0.4638	0.050	-0.105	-0.026	-0.117	-0.043	0.017
17	14.59	14	0.4066	-0.119	0.064	-0.101	-0.038	0.003	0.052
23	15.26	20	0.7615	0.030	-0.013	-0.036	0.024	0.005	-0.010
29	21.60	26	0.7104	0.045	-0.102	-0.080	-0.003	-0.105	0.000
35	25.90	32	0.7682	-0.089	-0.002	0.067	0.034	0.056	0.060
41	32.92	38	0.7030	0.052	0.049	0.056	-0.048	0.123	0.086
47	35.53	44	0.8149	-0.076	0.049	-0.032	-0.023	0.032	-0.040
53	37.39	50	0.9061	-0.003	0.044	0.017	-0.012	0.017	-0.078
59	41.72	56	0.9222	0.093	-0.000	-0.044	0.079	-0.016	-0.058
65	46.04	62	0.9354	0.044	-0.116	0.022	0.054	-0.015	-0.037
71	51.16	68	0.9365	0.005	-0.043	0.144	0.011	-0.012	0.036

The ARIMA Procedure

Model for variable y	
Period(s) of Differencing	1,24

No mean term in this model.

Autoregressive Factors	
Factor 1:	$1 - 0.49502 B^{**}(1) + 0.22034 B^{**}(2) + 0.14839 B^{**}(5) + 0.14956 B^{**}(6)$
Factor 2:	$1 + 0.51012 B^{**}(24)$

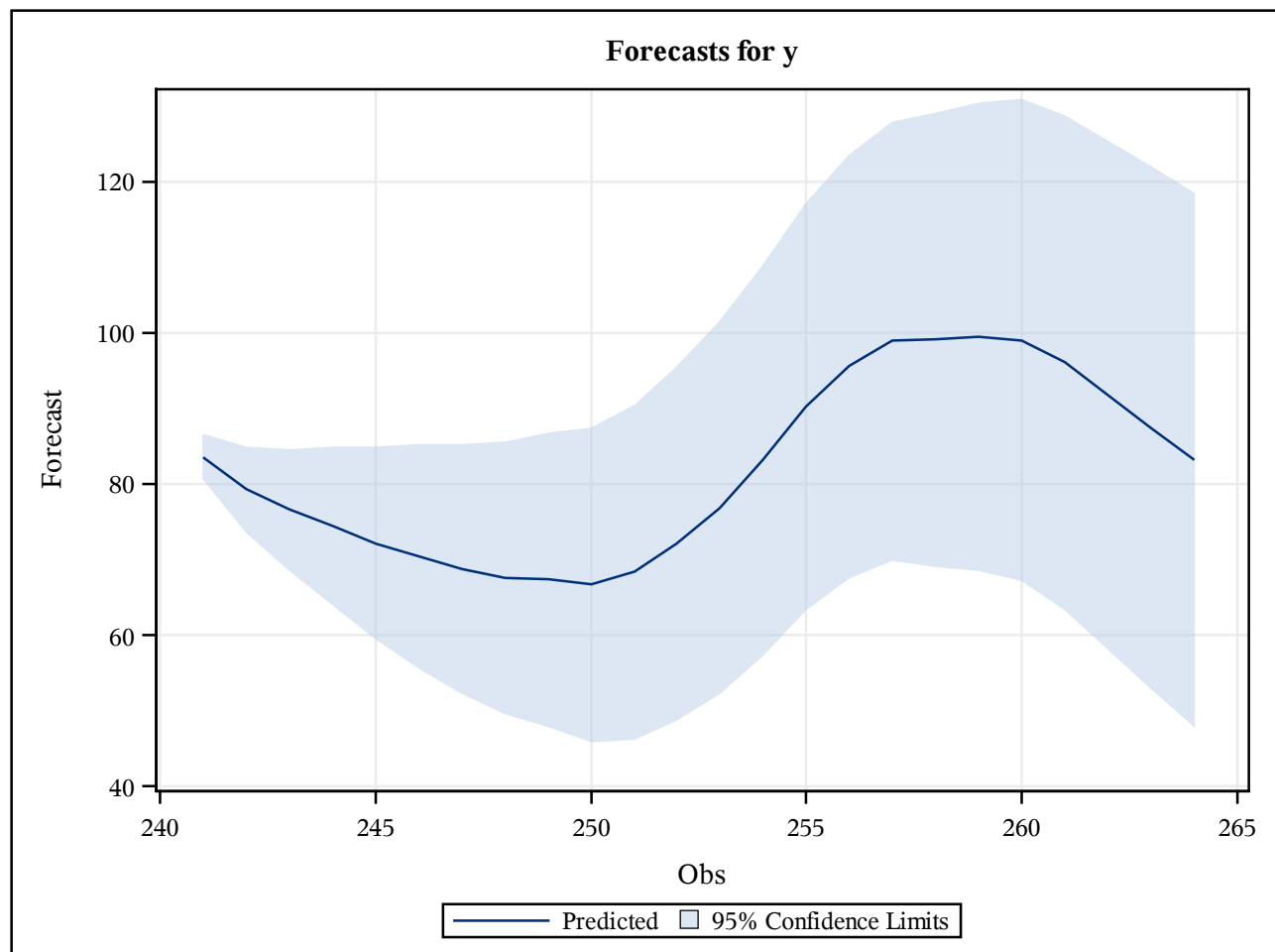
Input Number 1	
Input Variable	x1
Period(s) of Differencing	1,24

Numerator Factors	
Factor 1:	$0.20995 + 0.54585 B^{**}(1) + 0.39811 B^{**}(2) + 0.35423 B^{**}(3)$

Forecasts for variable y				
Obs	Forecast	Std Error	95% Confidence Limits	
241	83.5466	1.5165	80.5744	86.5189
242	79.2848	2.8733	73.6533	84.9162
243	76.5510	4.0861	68.5423	84.5596
244	74.4728	5.3139	64.0578	84.8878
245	72.1243	6.4816	59.4206	84.8279
246	70.4080	7.5116	55.6856	85.1304
247	68.7864	8.3854	52.3513	85.2214
248	67.5754	9.1640	49.6143	85.5364
249	67.3548	9.8913	47.9683	86.7414
250	66.6685	10.5838	45.9246	87.4123
251	68.3495	11.2469	46.3059	90.3930
252	72.1368	11.8887	48.8353	95.4384
253	76.8604	12.5157	52.3300	101.3908
254	83.1172	13.1241	57.3943	108.8400
255	90.2201	13.7063	63.3562	117.0840
256	95.5772	14.2599	67.6282	123.5262

The ARIMA Procedure

Forecasts for variable y				
Obs	Forecast	Std Error	95% Confidence Limits	
257	98.9130	14.7871	69.9308	127.8952
258	99.1136	15.2904	69.1450	129.0823
259	99.4325	15.7729	68.5182	130.3467
260	99.0359	16.2387	67.2087	130.8630
261	96.0347	16.6918	63.3194	128.7499
262	91.8033	17.1348	58.2198	125.3869
263	87.4402	17.5688	53.0060	121.8745
264	83.2296	17.9944	47.9612	118.4981



The ARIMA Procedure